

**Office of Nuclear Energy, Science and Technology  
FY 2006 Congressional Appropriation**

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| <b>Nuclear Energy-Energy Supply</b><br><b>\$557.574M</b><br><b>270 - \$420.201M</b><br><b>050 - \$137.373M</b> | <p>The Committee recommendation for nuclear energy programs under the Energy Supply and Conservation appropriation is \$377,701,000, a decrease of \$12,205,000 below the budget request. This net decrease reflects the Committee's recommendation to shift the responsibility for U-233 disposition at Oak Ridge from Nuclear Energy Programs to NNSA, a reduction of \$18,705,000, and a reduction of \$10,000,000 to Nuclear Power 2010. The Committee has provided an additional \$16,500,000 for increased programmatic activities for the Office of Nuclear Energy, as described below.</p> <p>Of the total funding of \$515,074,000 provided for Nuclear Energy programs and facilities, \$137,373,000 represents costs allocated to the 050 budget function (i.e., defense activities.) These defense-related costs, which include \$3,003,000 representing the security charges for reimbursable work, and are funded under the Other Defense Activities and Naval Reactors accounts. <b>Within the total amount provided, \$3,000,000 is for the transfer and implementation of nuclear safety technologies in Lithuania.</b></p> | <p>The Committee recommendation provides \$449,906,000 for nuclear energy, an increase of \$60,000,000 above the request.</p> | <p>The conference agreement provides a total of \$557,574,000 for nuclear energy programs. The Office of Nuclear Energy, Science and Technology is the lead office with landlord responsibilities for the Idaho site. Because this site provides considerable support to defense activities and naval nuclear reactors, \$123,873,000 of costs is allocated to Other Defense Activities and \$13,500,000 is allocated to Naval Reactors. Both programs are in the 050 budget function.</p> <p><b>Congressionally directed projects- Transfer of Nuclear Safety Technologies in Lithuania 3,000,000.</b></p> |

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| <p><b>University Reactor Fuel Assistance and Support</b><br/><b>\$27.000M</b></p> | <p>The Committee recommends \$24,000,000, the same as the budget request. The Committee continues to support DOE's programs to sustain existing university reactors and provide grants and fellowships that support nuclear science and engineering education.</p> | <p>The Committee recommends \$24,000,000 for university reactor fuel assistance and support. <b>The Committee recommends \$4,500,000 from within available funds for the Institute of Nuclear Science and Engineering at the Idaho National Laboratory.</b></p> <p>University nuclear engineering programs and university research reactors represent a fundamental and key capability in supporting our national policy goals in health physics, materials science and energy technology. The Committee strongly supports the University Reactor Fuel Assistance and Support program's efforts to provide fellowships, scholarships, and grants to students enrolled in nuclear energy, science and engineering programs and related areas like health physics at U.S. universities, as well as efforts to provide fuel assistance and reactor upgrade funding for university-owned research reactors.</p> <p>The Committee remains concerned about the ability of the Nation to respond to the growing demand for trained experts in nuclear science and technology in the face of financial and other challenges affecting engineering programs and research reactor facilities at American universities.</p> <p>The Committee strongly endorses the administration's commitment to cooperate with the People's Republic of China in its expansion of nuclear power. The Committee believes that the deployment of advanced U.S. reactor technology is critical to meet the growing energy demands in China and to contribute to improved air quality.</p> | <p>The conference agreement includes \$27,000,000. The conferees support the inclusion of the Institute of Nuclear Science and Engineering at Idaho National Laboratory in this program.</p> |

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| Nuclear Energy Research Initiative |       | <p>The Committee strongly supports the NERI program. Consistent with the goals of the November 1997 President's Committee of Advisors on Science and Technology [PCAST] that addresses energy research, the Committee directs the Department to maintain the existing, stand-alone NERI program that provides funding to peer-reviewed projects proposed by national laboratories, universities and industry on issues facing the nuclear energy industry. As provided in the PCAST report, research topics should include research into developing a proliferation resistant fuel cycle, improvements to reactor designs of new and existing designs, increased efficiency, as well as better knowledge of materials and fuel characteristics to support the Next Generation Nuclear Plant and Generation IV programs. The Committee is aware that the budget proposes to merge the NERI funding into the various research and development programs. <b>The Committee concurs with the request and provides NERI funding in the following manner: \$4,000,000 within the Advanced Fuel Cycle Initiative; \$4,000,000 within the Generation IV program; and \$2,000,000 for Nuclear Hydrogen Initiative.</b></p> |            |

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| <b>Nuclear Power 2010<br/>\$66.000M</b> | The Committee provides \$46,000,000 for Nuclear Power 2010, a decrease of \$10,000,000 from the budget request. | <p>The recommendation includes \$76,000,000 for nuclear power 2010. The Department is directed to focus the resources on the demonstration of the regulatory licensing processes of 10 CFR Part 52 for early site permits, design certifications, and combined construction and operating licenses. This is to be cost-shared with industrial and governmental entities.</p> <p>The Committee recommendation supports demonstration of key regulatory approval processes in order to encourage the deployment of new, advanced nuclear plants in the United States by the 2010 timeframe. The strong industry response to the Department's request for proposals for a Combined Operating License is a turning point in the future of nuclear energy in the country and presents the Department with a unique opportunity to facilitate the deployment of one or more new nuclear plants in a generation. Support for such a program is critical in order to diversify our electric generation fuel supply with the added benefit of not producing any greenhouse gas emissions.</p> | The conference agreement provides \$66,000,000 for Nuclear Power 2010. |

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| <p><b>Generation IV Nuclear Energy Systems</b><br/><b>\$55.000M</b></p> | <p>The Committee supports the Department's collaborative efforts on the research and development of a Generation IV reactor design that will be safer, more cost effective, and more proliferation resistant than current designs. The Committee recommends a total of \$45,000,000 for Generation IV Nuclear Energy Systems, the same as the budget request and an increase of \$5,320,000 over the fiscal year 2005 enacted level. <b>Within available funds, \$1,000,000 is made available for work on high temperature fuel fabrication techniques in support of the Generation IV Nuclear Energy Systems under the direction of Idaho National Laboratory (INL).</b></p> | <p>The recommendation includes \$60,000,000 for the Generation IV nuclear energy systems initiative, an increase of \$15,000,000 over the request. <b>The Committee directs \$40,000,000 to be used for the Next Generation Nuclear Plant [NGNP] program.</b> Prior to the submission of this budget the Office of Nuclear Energy had worked expeditiously on a process to select a reactor design from a competitive solicitation in order to deploy and test the design at the Idaho National Laboratory where it will serve as a test bed for electric and hydrogen cogeneration. The Department had received a strong response to the expression of interest and was preparing a request for proposal. Unfortunately, the current budget recommendation fails to adequately support the Next Generation Nuclear Plant. The Committee is concerned that the administration's strategy of collaborative international research lacks sufficient focus and doesn't support a specific schedule to facilitate the construction of a next generation reactor at the Idaho National Lab. The Generation IV budget should be used as an initiative to build and demonstrate new technologies and rebuild U.S. nuclear capabilities as opposed to the current proposal of indefinite research.</p> <p>This funding shall be used to support a design competition conducted by DOE as well as fund R&amp;D efforts linked to the NGNP program. <b>The Committee urges the Department to complete the competition by the end of fiscal year 2006. The Committee expects the Department to submit a budget for fiscal year 2007 that will fund a pre-engineering design that is consistent with the goal of testing hydrogen production or electricity generation by 2017 at the Idaho National Laboratory.</b> The Committee encourages the Department to give priority consideration to fast spectrum technologies. Coupled with efforts of the Advanced Fuel Cycle initiative, research in this program must keep nonproliferation as a primary objective to reduce the amount of plutonium and other high level wastes that are a by-product of current technology. The Committee also recognizes that new advances in materials and fuels must be developed before these technologies can be deployed. <b>In addition, the Department shall develop a R&amp;D road map by which the Department identifies the current technical challenges, proposes a research and development plan to resolve existing fast spectrum challenges within the Generation IV program, and downselects to no more than two technologies by the end of fiscal year 2007. The Department shall provide a copy of the Generation IV R&amp;D roadmap to the Committee by the end of fiscal year 2006.</b></p> | <p>The conferees provide \$55,000,000, of which <b>\$40,000,000 is provided for the Next Generation Nuclear Power Plant program. Within available funds, \$4,000,000 is provided for the development of multiple high temperature fuel fabrication techniques in support of the Generation IV Nuclear Energy Systems.</b></p> |

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|  |  | <p>The Committee remains interested in the potential use and application of small modular reactors that would be inherently safe, be relatively cost effective, contain intrinsic design features which would deter sabotage or diversion, require infrequent refuelings, and be primarily factory constructed and deliverable to remote sites. The Committee is particularly interested in design of a small modular fast reactor that can serve as both a test bed for small commercial reactors and to test fast spectrum technologies. <b>Within available funds, \$5,000,000 is provided for the development of high temperature fuel fabrication capabilities in Virginia, in support of the Generations IV program, under the direction of the Idaho National Laboratory.</b></p> |  |
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| <b>Nuclear Hydrogen Initiative<br/>\$25.000M</b> | The Committee provides \$20,000,000 for the nuclear hydrogen initiative, the same as the budget request. <b>The Committee expects the Department to meet the requirements of the Hydrogen Future Act of 1996 (P.L. 104-271) for competition and industry cost sharing, and expects the Office of Nuclear Energy, Science and Technology to coordinate the nuclear hydrogen initiative fully with the other hydrogen research being conducted by the Office of Science and the Office of Energy Efficiency and Renewable Energy.</b> | The Committee recommendation includes \$30,000,000, an increase of \$10,000,000.<br><br><b>The Committee provides an additional \$7,000,000 above the budget request for the Nuclear Hydrogen Initiative to accelerate essential materials research and development and component design, test and evaluation for implementing the high temperature sulfur-iodine water spitting process for hydrogen production necessary to the advanced reactor hydrogen co-generation project at the Idaho National Laboratory. In addition, the Department is directed to establish a 5-year Cooperative Agreement with the UNLV Research Foundation for advanced Nuclear Hydrogen Initiative materials research and development.</b> | The conferees provide \$25,000,000 for the Nuclear Hydrogen Initiative. <b>The conferees provide an additional \$5,000,000 over the request to accelerate essential materials research and development and component design, test and evaluation for implementing the high temperature sulfuriodine water splitting process for hydrogen production necessary to the advanced reactor hydrogen co-generation project at Idaho National Laboratory.</b> |

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| <b>Spent Fuel Recycling Initiative</b> | <p>As mentioned previously in this report, the Committee directs the Department to conduct a new Spent Fuel Recycling Initiative, which has linked elements in both the Nuclear Energy and Nuclear Waste Disposal accounts. One part of this initiative requires the Department to begin to move existing spent nuclear fuel away from commercial reactor sites to centralized interim storage at one or more DOE sites. This task is the responsibility of the Office of Civilian Radioactive Waste Management, and funding and direction are provided under the Nuclear Waste Disposal account. The other part of this initiative deals with developing a new strategy for managing future spent fuel, which is the responsibility of the Office of Nuclear Energy, Science and Technology within the Energy Supply and Conservation account.</p> <p>Up until the mid-1970s, the Federal government encouraged the reprocessing of commercial spent fuel in the United States, and commercial reprocessing facilities were developed at Morris (IL), West Valley (NY), and Barnwell (SC). Only the West Valley facility was ever operated, and it reprocessed both commercial and defense spent fuel. In the late 1970s, the United States decided to suspend commercial reprocessing efforts, primarily due to non-proliferation concerns that separated plutonium could be diverted to produce illicit nuclear weapons. Spent nuclear fuel, which contains a small percentage of plutonium created during the fission reaction, was considered to be inherently self-protecting because its high radiation levels would prevent its diversion to other purposes. Therefore, as long as it was not reprocessed, spent nuclear fuel was no considered to pose a significant proliferation risk. The U.S. ban on reprocessing was lifted in the 1980s, but economics did not support the reprocessing of commercial spent nuclear fuel at that time, especially in light of the lack of new nuclear plant orders and cancellation of existing orders after the Three Mile Island accident in 1979.</p> <p>Since the 1970s, U.S. policy on spent nuclear fuel has been to utilize the once-through fuel cycle and to store the spent fuel at reactor sites until it can be sent to the repository for permanent geologic disposal, without recycling the spent fuel. By the year 2005, however, several key conditions have changed significantly. A number of European countries are using existing reprocessing capabilities to recycle spent fuel in a safe and secure manner using the chemical reprocessing technology known as PUREX. There is no evidence that these reprocessing operations pose a significant proliferation risk. In part, the proliferation risk is manageable and acceptable because these countries recycle as they go, so that spent fuel is reprocessed and then promptly made into new mixed oxide fuel. These countries also vitrify the high-level waste promptly, avoiding the problems that the U.S. has encountered with storing large volumes of liquid high-level radioactive waste. New reprocessing technologies are becoming available that reduce the volume, toxicity, and fissile material content of the material requiring disposal in a permanent repository. New separation and reprocessing technologies may avoid the problems caused by separated</p> |        |            |



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|  | <p>plutonium and will produce smaller waste streams of high-level radioactive waste. Lastly, the theft or diversion of weapons-grade nuclear materials (i.e., plutonium and highly-enrichment uranium) is no longer the only nuclear-related security concern. After the terrorist attacks of September 11, 2001, there are serious concerns about the potential for using spent nuclear fuel to create a “dirty bomb” to spread radioactive contamination over a large area. Spent nuclear fuel is currently stored at 72 commercial reactor sites in 33 States, as well as at a number of other DOE and commercial storage sites. The utilities and the Federal government spent a significant amount of money securing this spent fuel. While some onsite storage of spent fuel is necessary while the spent fuel cools, and more extensive onsite storage may be a manageable security risk, the large-scale and long-term storage of spent fuel at reactor sites is nevertheless an expensive and unnecessary risk. These security costs are making the once-through fuel cycle progressively more expensive. Common sense dictates that these materials would be better stored in fewer, centralized interim storage facilities in remote locations, away from population centers and water supplies. Although reprocessed mixed oxide reactor fuel is presently more costly than fresh uranium oxide fuel, the price of uranium has been rising in recent years. Also, there is not a life-cycle comparison that reflects the added costs for onsite storage of once-through spent fuel, the extended life of the repository up to 300,000 years (in accordance with the court-ordered review of the radiation standard), and the estimated \$1 billion per year cost for delay in opening the Yucca Mountain repository.</p> <p>Shifting away from a once-through fuel cycle to a recycling approach does not eliminate the need for a geologic repository for future spent fuel disposal, because significant quantities of high-level waste that will require long-term geologic isolation will remain. However, recycling via advanced reprocessing technologies can reduce the volume of such high-level waste substantially. Such a volume reduction could obviate the need to expand Yucca or site a second repository in the near future. Reprocessing can also reduce the radiotoxicity of the waste products, making a repository a simpler proposition to license. Also, by vitrifying the high-level waste into glass cylinders, the long-term protection comes from the properties of the glass itself, lessening the reliance on metal containers for long-term isolation of spent fuel. A shift to recycling our nuclear reactor fuel will reduce the Nation’s dependence on foreign sources of fuel for present and planned future reactors, and the construction of new reactors can reduce the Nation’s dependence on imported fossil fuels.</p> <p><b>Therefore, the Committee directs the Office of Nuclear Energy, Science and Technology to focus its research under the Advanced Fuel Cycle Initiative to develop advanced reprocessing and transmutation technologies that will improve upon the existing PUREX process. The Department shall accelerate this research in order to make a specific technology recommendation, not later than the end of fiscal year 2007, to the President and Congress on a particular reprocessing technology that should be</b></p> |  |  |
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|  | <p><b>implemented in the United States. In addition, the Department shall prepare an integrated spent fuel recycling plan for implementation beginning in fiscal year 2007,</b> including recommendation of an advanced reprocessing technology and a competitive process to select one or more sites to develop integrated spent fuel recycling facilities (i.e., reprocessing, preparation of mixed oxide fuel, vitrification of high level waste products, and temporary process storage). Some of the DOE sites would seem obvious candidates for such facilities, but there may also be interest from some States and other entities to host such facilities.</p> |  |  |
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| <b>AFCI<br/>\$80.000M</b> | <p>The Committee recommendation for the Advanced Fuel Cycle Initiative (AFCI) is \$75,500,000, an increase of \$8,044,000 over the current year and \$5,500,000 more than the budget request. The additional funds are to be used to accelerate the development and selection of a separations technology no later than the end of the fiscal year 2007 that can address the current inventories of commercial spent nuclear fuel, and prepare an integrated spent nuclear fuel recycling plan. <b>The Committee directs the Department to submit the integrated spent nuclear fuel recycling plan to the House and Senate Committees on Appropriations by January 31, 2007.</b></p> | <p>The Committee recommendation includes \$85,000,000, an increase of \$15,000,000 over the budget request. The initiative should continue to focus on development of fuel cycle technologies that minimize the toxicity of final waste products resulting from spent fuel while recovering energy remaining in spent fuel; minimize proliferation concerns and environmental impacts of the fuel cycle and minimize the number of reprocessing steps so as to minimize system costs. The initiative shall assist the Secretary with development of alternative technology options.</p> <p>Based on the success learned at the Savannah River Technology center of the Uranium Extraction Technology, known as UREX in 2002, the Committee expects the Department to expand its efforts to advance research of aqueous spent fuel treatment and to begin the engineering scale demonstrations. <b>The Committee recommends an additional \$10,000,000 to accelerate the design activities associated with a proposed Engineering Scale Demonstration [ESD].</b> The ESD will provide the United States with the capability to conduct research and development into advanced spent fuel separations and transmutation from laboratory scale through engineering scale prior to commercial deployment. The budget request provided funds for pre-conceptual design activities only. This funding will allow completion of the conceptual design in fiscal year 2006 and enable preengineering design to commence in fiscal year 2007. In addition to studying light water reactors, the Committee expects the Department to evaluate fast reactors that are capable of destroying larger amounts of long-lived radioactive material.</p> <p>To provide confidence in the technology options proposed, the project will use Department of Energy national laboratory and university expertise to perform research and development of advanced technologies for spent fuel treatment and transmutation of plutonium, higher actinides and long-lived fission products. Advanced nuclear material recycle and safeguard technologies, proliferation-resistant nuclear fuels, and transmutation systems shall be investigated. Both reactor-based and a combination of reactor and accelerator-based transmutation approaches may be included as part of the research and systems analysis.</p> <p>The project shall use international and university collaborations to provide cost effective use of research</p> | <p>The conferees provide \$80,000,000 for the Advanced Fuel Cycle Initiative (AFCI), \$10,000,000 over the request. The additional funds are to be used to accelerate the design activities associated with a proposed Engineering Scale Demonstration (ESD). This funding will allow completion of the conceptual design in fiscal year 2006 and enable pre-engineering design to commence in fiscal year 2007. The conferees direct the Department to accelerate the development of a separations technology that can address the current inventories of commercial spent nuclear fuel and select the preferred technology no later than the end of fiscal year 2007.</p> <p><b>The conferees direct the Department to submit the spent nuclear fuel recycling technology plan to the House and Senate Committees on Appropriations by March 1, 2006.</b></p> <p><b>Reporting requirement.-- The conferees direct the Department to submit to the House and Senate Committees on Appropriations a report on sodium bonded spent fuel, as outlined in the Senate report, no later than March 1, 2006.</b></p> <p><b>Congressionally Directed Projects-UNLV Research Foundation 5-year cooperative agreement to study deep burn-</b></p> |

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|  |  | <p>funding. <b>The Committee has provided an additional \$6,000,000 to the Advanced Fuel Cycle Initiative for the UNLV Research Foundation and directs the Department to enter into a 5-year cooperative agreement to study deep burn-up of nuclear fuel and other fuel cycle research to eliminate the need for multiple spent nuclear fuel repositories, to eliminate weapons useable material from disposed spent fuel, and to maintain forever potential radiological releases from a repository below currently legislated limits.</b></p> <p>The Committee is aware of the excellent recent progress in the jointly funded U.S/Russian program to develop the GT-MHR. The recent completion of the particle fuel fabrication and testing facilities in Russia along with continued progress in the area of the power conversion system indicates the continued support of the Russians for the development of this option. The Committee also notes that the GT-MHR is a leading Gen IV reactor type. <b>Within the Advanced Fuel Cycle Initiative, \$3,000,000 is provided for the Idaho Accelerator Center and the Department is directed to enter into a 5-year cooperative agreement with IAC. The Department is provided \$7,000,000 to develop a Nuclear Energy Materials Test Station at Los Alamos Neutron Science Center to advance the technology needed to support the materials and fuel experiments required by the Advanced Fuel Cycle Initiative and for the exploration of Generation IV fast neutron spectrum systems.</b> Since the closure of the Fast Flux Test Facility, resulting in no domestic fast neutron source for conducting actinide transmutation, the Materials Test Station will advance the development of improved fuel cycles that can reduce the quantity, heat generation and toxicity of spent nuclear fuel. <b>The Committee recommendation includes \$1,000,000 for the Center for Materials Reliability and \$750,000 for nuclear transportation hazard research at the University of Nevada-Reno.</b></p> <p>The Committee is aware of the fact that the Department is responsible for the maintenance of 62 metric tons of sodium bonded spent nuclear fuel located in Idaho. Of these amounts, the Office of Environmental Management manages 34 tons (55 percent of the total) from the Detroit Edison Fermi plant which is stored at the Idaho Nuclear Technology and Engineering Center. The remaining 28 tons (45 percent) is from the Experimental Breeder Reactor-II and is managed by the Office of Nuclear Energy, AFCI program. The AFCI</p> | <p><b>up of nuclear fuel and other fuel cycle research to eliminate the need for multiple spent nuclear fuel repositories, to eliminate weapons useable materials from disposed spent fuel, and to maintain forever potential radiological releases from a repository below currently legislated limits (NV)-\$5,000,000. Idaho Accelerator Center (ID)-\$2,000,000. Nuclear Energy Materials Test Station at Los Alamos Neutron Science Center (NM)-\$3,500,000. University of Nevada Reno Center for Materials Reliability (NV)-\$1,000,000. Univ. of Nevada Reno Nuclear Transportation Hazard Research (NV)-\$750,000.</b></p> |
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|  |  | <p>program spends \$18,000,000 annually to maintain this stockpile, funding that could be more effectively used to explore critical materials and fuels research and development. The EBR-II reactor fuel adds little to the AFCI program, which is focused on Generation IV fuel types such as nitride fuels, and not solid metal fuels such as the EBR-II fuels. The AFCI program only needs 3 percent of the inventory for future pyroprocessing experiments. <b>The Committee directs the Department to undertake a study to evaluate and propose a disposal solution for the entire 62 tons of sodium bonded spent fuel and to consider what minimal amount of fuel is needed for future experiments under the AFCI. The Department shall provide a report recommending the preferred disposal pathway to the Committee no later than March 1, 2006.</b></p> |  |
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| <b>Radiological Facilities Management</b><br><b>\$54.595M</b> | The purpose of the Radiological Facilities Management program is to maintain the critical infrastructure necessary to support users from the defense, space, and medical communities. These users fund DOE's actual operational, production, and research activities on a reimbursable basis.  | The Committee recommends \$64,800,000. The purpose of this program is to maintain the critical user facilities in a safe, environmentally compliant and cost-effective manner to support national priorities in serving our space missions or medical fields. Facilities located at Oak Ridge National Laboratory, Los Alamos, Sandia, Brookhaven and Idaho National Labs all support this mission. The Committee supports the ongoing efforts at Los Alamos National Laboratory. <b>The Committee recommends the investment of \$1,300,000 in new equipment for Los Alamos National Lab and \$12,700,000 provided to operate the bench-scale scrap recovery line and to address the long-term storage and disposal of waste residues.</b> | The purpose of the Radiological Facilities Management program is to maintain the critical infrastructure necessary to support users from the defense, space, and medical communities on a reimbursable basis. The conference agreement provides \$54,595,000 for this work.   |
| <b>Space and Defense Infrastructure</b><br><b>\$39.700M</b>   | <p>The Committee recommendation is \$39,700,000, an increase of \$8,500,000 over the budget request. This includes the requested amounts to operate radioisotope power systems at the Idaho National Laboratory (INL), maintain iridium capabilities at Oak Ridge National Laboratory, and maintain and operate the Pu-238 mission at Los Alamos.</p> <p>The Committee recognizes the need to make available additional floor space in TA-55 for pit production, and directs the Department to develop a strategy to relocate expeditiously the mission for Pu-238 processing from Los Alamos to Idaho National Laboratory. <b>The Committee</b></p> | The Committee recommendation is \$31,200,000, the same as the budget request.  | The conferees provide \$39,700,000 for Space and Defense Infrastructure. This includes the requested amounts to operate radioisotope power systems at the Idaho National Laboratory (INL), maintain iridium capabilities at Oak Ridge National Laboratory, and maintain and operate the Pu-238 mission at Los Alamos. The conferees recognize the need to free up floor space in TA-55 for pit production, and direct the Department to develop a strategy to relocate expeditiously the mission for Pu-238 processing from Los Alamos to INL. The conferees provide an increase of \$8,500,000 for INL to plan and build the capability to assume the Pu-238 mission, so |

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|  | <p><b>provides an increase of \$8,500,000 for INL to plan and build the capability to assume the Pu-238 mission, avoiding a gap in capability during the mission transfer. The Committee directs the Department to provide a mid-year report by January 31, 2006, on the transfer strategy and associated costs.</b></p>  |  | <p>there is no gap in capability during the mission transfer. <b>The conferees direct the Department to provide a mid-year report by March 31, 2006, on the transfer strategy and associated costs.</b></p>   |
| <p><b>Medical Isotope Infrastructure<br/>\$14.395M</b></p> | <p>The Committee recommendation is \$14,395,000, a reduction of \$18,705,000 from the budget request. The recommendation provides the requested amounts for Oak Ridge buildings 3047, 5500, 9204-3, the Calutron building at Y-12, isotope business management information, and for various facility costs at Brookhaven, Los Alamos, and Sandia national laboratories.</p> <p>The Committee provides no funding for the Medical Isotope Production and Building 3019 Complex Shutdown project. The committee has been skeptical since the onset of this project, skepticism which has been confirmed when the fiscal year 2006 budget justification data sheet reveals that costs for this project have increased by 3.5 times over the previous cost estimate. The Department acknowledges that this new increased estimate does not even include funding necessary to meet the latest security requirements for this facility. Therefore, the Committee directs the Department to terminate promptly the Medical Isotope Production and Building 3019 Complex Shutdown project, and directs the NNSA to retrieve the U-233</p> | <p>The Committee recommendation is \$33,100,000, the same as the budget request.</p> | <p>The conferees provide \$14,395,000 for Medical Isotopes Infrastructure. The conferees provide no funding for the Medical Isotope Production and Building 3019 Complex Shutdown project. The conferees direct the Department to terminate promptly the Medical Isotope Production and Building 3019 Complex Shutdown project. The responsibility for disposition of the U-233 is transferred to the Defense Environmental Management program per DOE's recommendation, and the conferees have provided funds in the Defense Environmental Management appropriation for disposition of the material stored in Building 3019.</p> |

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|  | <p>material and put in into secure storage at a NNSA site.</p> <p><b>One of the highest priorities for the Committee is to ensure the swift and safe consolidation of special nuclear materials at DOE sites. The Committee expects the Office of Nuclear Energy to work cooperatively and effectively with the Office of Security and Performance Assurance to expeditiously achieve consolidation goals, thereby limiting the number of sites where the DOE holds and protects category I and II special nuclear materials.</b></p> |   |  |
| <p><b>Enrichment Facility Infrastructure<br/>\$.500K</b></p> | <p>The Committee recommendation includes the requested \$500,000 for oversight of enrichment facilities at the Government-owned, USEC-operated gaseous diffusion plant at Puducah.</p>  | <p>The Committee recommendation is \$500,000, the same as the budget request.</p> | <p>The conferees provide \$500,000 for Enrichment Facility Infrastructure.</p> |



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| <b>Idaho Facilities Management<br/>\$113.862M</b>  | This program funds the operations and construction activities at the Idaho National Laboratory (INL), including ANL-West and the Test Reactor Area. The Committee provides \$113,862,000 for Idaho Facilities Management, an increase of \$16,000,000 over the budget request. Of this total, \$82,600,000 is allotted to the 270 budget function and the balance, \$31,262,000, is allotted to the 050 function and funded under Other Defense Activities and Naval Reactors.  | This program funds the site-wide landlord infrastructure activities for the Idaho National Laboratory. These activities are required to support the laboratory's technical efforts such as research on the Advanced Fuel Cycle Initiative, Generation IV nuclear energy systems, the Space and Defense Power Systems program, and the Navy's nuclear propulsion research and development program.                 | The conference agreement provides \$113,862,000 for Idaho National Laboratory (INL) operations and infrastructure. Of this total, \$82,600,000 is allotted to the 270 budget function and the balance, \$31,262,000, is allotted to the 050 function and funded under Other Defense Activities and Naval Reactors.   |
| <b>INL operations</b><br><b><u>House</u></b><br><b>\$69.145M (270)</b><br><b>+17.762M (050)</b><br><b>+13.500M from Naval Reactors (050)</b><br><b>+2.500M utility corridor extension project (270)</b><br><b>\$102.907M Total</b> | The Committee recommendation provides the requested amount of funding, \$69,145,000 from function 270 Energy Supply, \$17,762,000 from Other Defense Activities, and an increase of \$13,500,000 from the Office of Naval Reactors to support the Idaho National Laboratory's Advanced Test Reactor (ATR). The increase is provided to maintain the current level of operations, make improvements, and implement the Long Range Operating Plan at the ATR. <b>The Committee also provides an additional \$2,500,000 for the utility corridor extension project at the Idaho National Laboratory.</b> | The Committee recommendation for these infrastructure activities is \$111,362,000. Of this total budget request \$80,100,000 is funded in the Energy Supply appropriation, which includes \$10,955,000 for construction activities. The Committee provides \$17,762,000 in the Other Defense Activities appropriation and \$13,500,000 to be transferred from Naval Reactors program to support the ATR Gas Loop. | The conferees provide \$102,907,000 for INL operations, \$69,145,000 from function 270 Energy Supply, \$17,762,000 from Other Defense Activities, and an increase of \$13,500,000 from the Office of Naval Reactors to support the Idaho National Laboratory's Advanced Test Reactor (ATR) life extension program.<br><br><b>Congressionally Directed Project- the conferees also provide an additional \$2,500,000 for the utility corridor extension project at the Idaho National Laboratory.</b> |
| <b>INL Construction</b><br><b><u>House</u></b><br><b>\$10.955M (270)</b><br><b><u>Senate</u></b><br><b>\$10.955M (270)</b>   | The Committee recommends \$10,955,000 for Idaho facilities construction, the same as the budget request. This includes the requested amount for the Gas Test Loop in the Advanced Test Reactor.   | The Committee recommendation is \$10,955,000 for construction activities, the same as the budget request.   | The conferees provide \$10,955,000 for Idaho facilities construction. This includes the requested amounts for the Gas Test Loop in the Advanced Test Reactor.  |

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|--|---|---|---|
| <b>Program Direction</b><br><b>\$30.006M (270)</b><br><u><b>+31.103M (050)</b></u><br><b>\$61.109M Total</b> | <p>The Committee recommends a total funding level for program direction of \$61,109,000, the same as the budget request and \$1,033,000 more than the current fiscal year. Of this amount, \$30,006,000 is funded in the Energy Supply appropriation under budget function 270, and \$31,103,000 is funded in the Other Defense Activities appropriation under budget function 050.</p> | <p>The Committee recommendation includes \$30,006,000 for program direction, the amount of the request. The Committee has also provided \$31,103,000 from Other Defense Activities.</p> | <p>The conference agreement includes \$61,109,000 for program direction. Of this amount, \$30,006,000 is funded in the Energy Supply appropriation under budget function 270, and \$31,103,000 is funded in the Other Defense Activities appropriation under budget function 050.</p> |

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| <b>Program</b>  | <b>House</b>   | <b>Senate</b>   | <b>Conference</b>  |
|---|--|---|--|
| <b>Other Defense Activities at Idaho National Laboratory</b><br><b>\$123.873M</b><br><br><b>Idaho Facilities Management</b><br><b>\$17.762M</b><br><br><b>Safeguards and Security</b><br><b>\$75.008M</b><br><br><b>Program Direction</b><br><b>\$31.103M</b> | <p>The Committee recommendation includes \$123,873,000 to fund the defense-related (050 budget function) activities at the Idaho National Laboratory (INL) and associated Idaho cleanup sites. This amount includes \$17,762,000 for INL infrastructure, the same as the budget request, \$78,008,000 for Idaho site-wide safeguard and security, the same as the budget request; and \$31,103,000 for program direction to support Headquarters and Idaho Field Office personnel.</p> | <p>The Committee recommendation includes \$123,873,000 to fund the defense-related activities at the Idaho National Laboratory [INL] and associated Idaho cleanup sites. This amount includes \$17,762,000 for the INL infrastructure, the same as the budget request, \$75,008,000 for Idaho site-wide safeguards and security, the same as the budget request; and \$31,103,000 for program direction to support headquarters and Idaho Field Office personnel.</p> | <p>The conference agreement provides \$123,873,000 for defense-related activities at the Idaho National Laboratory (INL) and associated Idaho cleanup sites.</p> <p>The conferees provide \$75,008,000 for Idaho sitewide safeguards and security as an 050 Defense Activity under the Other Defense Activities account.</p> |

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| <b>Program</b>                               | <b>House</b>   | <b>Senate</b>  | <b>Conference</b>  |
|--|--|--|--|
| <b>Naval Reactors Transfer<br/>\$13.500M</b> | The Committee recommendation is \$799,500,000, an increase of \$13,500,000 over the budget request. This additional amount is to be transferred to the Office of Nuclear Energy to support the Idaho National Laboratory's Advanced Test Reactor (ATR). The Committee's increase is provided to maintain the current level of operations and implement the Long Range Operation Plan at the ATR. | The Committee recommendation includes \$799,500,000, an increase of \$13,500,000 above the budget request. The increase is to be transferred to the Office of Nuclear Energy to support the Idaho National Laboratory's Advanced Test Reactor. | The conference agreement provides \$789,500,000 for Naval Reactors, an increase of \$3,500,000 over the budget request. The conferees agree to transfer \$13,500,000 to the Office of Nuclear Energy to support the Idaho National Laboratory's Advanced Test Reactor. |